## (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 9 June 2005 (09.06.2005)

PCT

(10) International Publication Number WO 2005/053266 A2

(51) International Patent Classification7: 12/56

H04L 29/06,

(21) International Application Number:

PCT/GB2004/004711

(22) International Filing Date:

5 November 2004 (05.11.2004)

(25) Filing Language:

English

(26) Publication Language:

**English** 

(30) Priority Data:

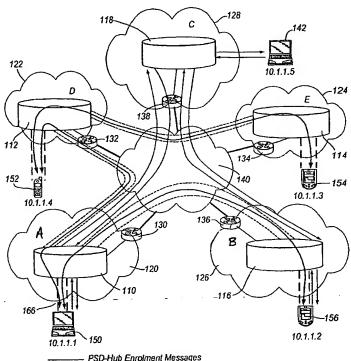
0326969.3 0408965.2 19 November 2003 (19.11.2003) GB 22 April 2004 (22.04.2004)

(71) Applicants (for all designated States except US): VODA-FONE GROUP PLC [GB/GB]; Vodafone House, The Connection, Newbury, Berkshire RG14 2FN (GB). TELE-FONAKTIEBOLAGET LM ERICSSON [SE/SE]; S-126 25 Stockholm (SE).

- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHANDRASIRI, Pubudu [LK/GB]; 17 Hollerith Rise, Bracknell, Berkshire RG12 7GJ (GB). GURLEYEN, Bulent, Ozgur [TR/GB]; 35 Greys Court, Sidmouth Street, Reading, Berkshire RG1 4PP (GB). NASLUND, Mats [SE/SE]; Grimstagatan 161, S-162 58 Vallingby (SE). JONSSON, Annika [SE/SE]; Skapnacks Alle 45, S-128 33 Stockholm (SE). GEHRMANN, Cristian [SE/SE]; Sankt Mansgatan 17A, S-222 29 Lund (SE).
- (74) Agent: FOSTER, Mark, Charles; Mathisen, Macara & Co., The Coach House, 6-8 Swakeleys Road, Ickenham, Uxbridge UB10 8BZ (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,

[Continued on next page]

(54) Title: NETWORKS



(57) Abstract: A Personal Area Network Security Domain (PSD) is formed between devices (142, 150, 152, 154 and 156). The PSD allows the sharing of data and/or resources between the devices within the PSD. The devices within the PSD are located remotely from one another. For example, communication between device (150 and 156) will be performed via mobile or cellular telephone network (120), the Internet (140) and mobile or cellular telephone network (126). Each network (120, 126) is provided with a PSD Hub, which enables an IPsec secure connection between the devices (150 and 156) to be established.

PSD-Hub Enrolment Messages IP sec Tunnel Between PSD-Hubs IP sec protected PSD-Member Traffic IP sec Tunnel Between PSD Member and the PSD-Hub

## 

KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.